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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/646,564	12/18/2000	Nathalie Feyt	032326-072	1742

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[REDACTED] EXAMINER

TREMBLAY, MARK STEPHEN

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

2876

DATE MAILED: 12/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/646,564	FETY ET AL.
	Examiner Mark Tremblay	Art Unit 2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 September 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 9 is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) 8 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
- 1) Certified copies of the priority documents have been received.
 - 2) Certified copies of the priority documents have been received in Application No. _____.
 - 3) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) Interview Summary (PTO-413) Paper No(s). _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

Applicant: Feyt et al.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the
5 basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use
or on sale in this country, more than one year prior to the date of application for patent in the United States.

10 Claims 1, 5-7 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent
#4,211,919 to Ugon ("Ugon" hereinafter). Ugon discloses a device for hiding operations
performed by a component intended to be integrated into a smart card, comprising at least one
means for modifying electrical current consumption of said component during the performance
of operations (see abstract and column 8, lines 24-53).

15 Claims 1, 3, 4, and 7 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S.
Patent #4,932,053 to Fruhauf et al. ("Fruhauf" hereinafter). Fruhauf discloses a device for hiding
operations performed by a component intended to be integrated into a smart card, comprising at
least one means for modifying electrical current consumption of said component during the
20 performance of operations (see e.g. abstract).

25 Claims 1, 5, and 7, are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S.
Patent #4,813,024 to Lisimaque et al. ("Lisimaque" hereinafter). Lisimaque discloses a device
for hiding operations performed by a component intended to be integrated into a smart card,
comprising at least one means for modifying electrical current consumption of said component
during the performance of operations (see abstract).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
30 obviousness rejections set forth in this Office action:

5 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10 This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

15 Claim 2 is rejected under 35 U.S.C. § 103 as being unpatentable over Ugon. Ugon discloses the features of the invention as described above, but does not teach the "integration" recited in claim 2. Official Notice is taken that using a capacitor or voltage regulator to integrate current consumption is old and well known in the art. See In Re Malcolm 1942 C.D.589:543 O.G. 440. Voltage regulators, including capacitors, typically serve on an electronic device to 20 integrate the current supplied at the power supply. These are common on smart cards. One of their inherent effects is to mask current usage by the device. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide a voltage regulator on a smart card as taught by Ugon, because this would serve to regulate the voltage supplied to the device, and further would inherently serve to mask the current used by the device 25 at a particular time by integrating the current used by the device over time.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

30 U. S. Patent #6,064,740 to Curiger et al., U. S. Patent #5,995,629 to Reiner, U. S. Patent #5,404,402 to Sprunk, U. S. Patent #4,916,333 to Kowalski and U. S. Patent #4,827,451 to Marquot et al. are cited for showing other methods for masking cryptographic operations on a smart card, suggesting a myriad of non-obvious solutions to this problem are possible.

Allowable Subject Matter

Claim 9 is allowed.

Claim 8 is objected to as being dependent upon a rejected base claim, but would be
5 allowable if rewritten in independent form including all of the limitations of the base claim and
any intervening claims.

Claims 8 and 9, when read in light of the specification, make it clear that the hiding step
is performed by using a random write to the EEPROM (which requires a charge pump) and
masking the encryption operation within the EEPROM write waiting period. This simply is not
10 taught or suggested in the prior art. A normal EEPROM write is disclosed by Applicant on page
6 of the specification.

Voice

15 Inquiries for the Examiner should be directed to Mark Tremblay at (703) 305-5176. The
Examiner's regular office hours are 10:30 am to 7:00 pm EST Monday to Friday. Voice mail is
available. If Applicant has trouble contacting the Examiner, the Supervisory Patent Examiner,
Michael Lee, can be reached on (703) 305-3503. Technical questions and comments concerning
20 PTO procedures may be directed to the Patent Assistance Center hotline at 1-800-786-9199 or
(703) 308-4357.

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MARK TREMBLAY
PRIMARY EXAMINER

December 15, 2002